- 1. A method of organizing stored information on a
- 2 non-volatile, re-programmable semiconductor memory
- 3 comprising:
- 4 partitioning said memory into a plurality of
- 5 partitions, each having a defined address; and
- 6 storing the defined address for one partition in
- 7 another partition.
- 1 2. The method of claim 1 further including storing
- 2 information about the number of partitions.
- The method of claim 1 further including storing a
- 2 boot loader in one of said partitions.
- 1 4. The method of claim 1 further including storing a
- 2 file system in one of said partitions.
- 5. The method of claim 1 further including storing a
- 2 kernel for an operating system in one of said partitions.
- 1 6. The method of claim 1 further including storing
- 2 information in association with said addresses about
- 3 whether or not an integrity check needs to be done on the
- 4 data stored at the associated address.

- The method of claim 1 further including storing,
- 2 in association with the address of a partition, information
- 3 about the type of information stored in the partition.
- 1 8. The method of claim 7 further including storing
- 2 information about whether or not the information stored at
- a given partition is a boot loader, a kernel or a file
- 4 system.
- 1 9. The method of claim 7 including storing
- 2 information about the load address for said information in
- 3 association with said address.
- 1 10. A non-volatile, re-programmable semiconductor
- 2 memory comprising:
- a plurality of addressable partitions, including
- 4 a partition storing an operating system; and
- a storage location storing an address for one of
- 6 said partitions in association with information about the
- 7 information stored in said partition.
- 1 11. The memory of claim 10 wherein said memory is a
- 2 FLASH memory.
- 1 12. The memory of claim 10 wherein one of said
- 2 partitions stores a basic input/output system.

- 1 13. The memory of claim 10 wherein one of said
- 2 partitions stores a file system.
- 1 14. The memory of claim 10 wherein one of said
- 2 partitions stores a kernel for an operating system.
- 1 15. The memory of claim 10 wherein one of said
- partitions stores a boot loader.
- 1 16. A method of initializing a processor-based system
- 2 comprising:
- 3 validating information stored in a non-volatile,
- 4 re-programmable semiconductor memory; and
- 5 using a allocation table stored in said memory to
- find an operating system stored in said memory;
- 7 loading said operating system; and
- 8 executing said operating system.
- 1 17. The method of claim 16 further including
- 2 selecting a boot loader to load said operating system.
- 1 18. The method of claim 17 including using said
- 2 allocation table to locate said boot loader.

- 1 19. The method of claim 16 including performing
- 2 initialization and the power on self test before validating
- 3 information stored in said memory.
- 1 20. The method of claim 16 including validating
- 2 information stored in said memory using a cyclic recovery
- 3 check software stored in said memory.
- 1 21. An article comprising a medium storing
- 2 instructions that cause a processor-based system to:
- 3 validate information stored in a non-volatile,
- 4 re-programmable semiconductor memory;
- 5 use an allocation table to find an operating
- 6 system stored in said memory;
- 7 load said operating system; and
- 8 execute said operating system.
- 1 22. The article of claim 21 further storing
- 2 instructions that cause a processor-based system to select
- 3 a boot loader to load said operating system.
- 1 23. The article of claim 22 further storing
- 2 instructions that cause a processor-based system to use
- 3 said allocation table to locate said boot loader.

- 1 24. The article of claim 21 further storing
- 2 instructions that cause a processor-based system to perform
- 3 initialization and the power on self test before validating
- 4 information stored in said memory.
- 1 25. The article of claim 21 further storing
- 2 instructions that cause a processor-based system to
- 3 validate information in said memory using a cyclic recovery
- 4 check software stored in said memory.
- 1 26. A processor-based system comprising:
- 2 a processor;
- a volatile memory coupled to said processor; and
- a re-programmable, non-volatile semiconductor
- 5 memory coupled to said processor, said semiconductor memory
- 6 including a plurality of partitions, one of said partitions
- 7 storing an operating system and another of said partitions
- 8 storing the addresses of the other partitions in
- 9 association with information about what is stored in each
- 10 of said partitions.
 - 1 27. The system of claim 26 wherein said semiconductor
 - 2 memory is a FLASH memory.
 - 1 28. The system of claim 26 wherein one of said
 - 2 partitions stores a basic input/output system.

- 1 29. The system of claim 26 wherein one of said
- 2 partitions stores a file system.
- 1 30. The system of claim 26 wherein one of said
- 2 partitions stores a boot loader.